

a first filter positioned between said canister and said means for applying negative pressure;
a second filter positioned between said first filter and said means for applying negative pressure; and
a means for managing a power supply source to power said electric pump.

14. (Amended) The system of claim 13 wherein said means for managing said power supply comprises deactivating a backlight to a display after a predetermined interval.

15. (Amended) The system of claim 13 wherein said means for managing said power supply comprises preventing electric power from reaching an electric motor until sufficient power has been generated to activate said motor.

16. (Amended) The system of claim 13 further comprising a means for sampling wound fluids.

17. (Amended) The system of claim 13 further comprising a means for securing said system to a stationary object.

18. (Amended) The system of claim 13 wherein said porous pad is comprised of a polyvinyl alcohol foam.

19. (Amended) A system for stimulating the healing of tissue, comprising:

- a porous pad;
- an airtight dressing;
- an electric pump for applying negative pressure to a wound site;
- a canister removably connected to said means for applying negative pressure;
- a housing for containment of said canister and said means for applying negative pressure;
- a means for securing said housing to a stationary object; and
- a means for managing a power supply for said electric pump.

21. (Amended) The system of claim 19 wherein said power supply for said electric pump comprises a portable power unit.

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23. (Amended) The system of claim 19 wherein said means for managing a power supply is comprised of deactivating a backlight to a display on said housing after a predetermined interval.

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24. (Amended) The system of claim 19 wherein said means for managing a power supply is comprised of preventing electric power from reaching an electric motor until sufficient power has been generated to activate said motor.

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26. (Amended) The system of claim 19 further comprising a conduit having a proximal end and a distal end, and wherein said proximal end is removably connected to said canister and said distal end is in fluid communication with the wound site.

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28. (Amended) The system of claim 27 wherein a plurality of said detection conduits are arranged about said drainage conduit.

31. (Amended) A system for stimulating the healing of tissue, comprising:

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- a porous pad;
- an airtight dressing;
- a means for applying negative pressure to a wound site;
- a means for managing a power supply to said means for applying said negative pressure; and
- a means for varying said negative pressure over a time interval.

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34. (Amended) The system of claim 31 wherein said means for managing said power supply is comprised of deactivating a backlight to a display of said system after a predetermined interval.

35. (Amended) The system of claim 31 wherein said means for managing said power supply is comprised of preventing electric power from reaching an electric motor until sufficient power has been generated to activated said motor.

36. (Amended) A system for stimulating the healing of tissue, comprising:

- a porous pad;
- an airtight dressing;
- an oscillating pump for applying negative pressure to a wound site;
- a means for maximizing pump flow rate over a pressure range; and
- a means for managing a power supply to said oscillating pump.

Please add new claims 37 through 40 as follows:

37. (New) The system of claim 36 wherein said means for maximizing pump flow rate comprises a means for varying a drive frequency.

38. (New) The system of claim 36 wherein said means for varying said drive frequency comprises:

a pressure sensor for measuring pressure across said pump;
a control system for determining optimum drive frequency for said pump relative to pressure detected by said pressure sensor; and
a variable frequency drive circuit for driving said pump at said optimum drive frequency.

39. (New) The system of claim 36 wherein said means for managing a power supply is comprised of deactivating a backlight to a display of said system after a predetermined interval.

40. (New) The system of claim 36 wherein said means for managing a power supply is comprised of preventing electric power from reaching said oscillating pump until sufficient power has been generated to activated said oscillating pump.